

L Number	Hits	Search Text	DB	Time stamp
1	298118	excavator or excavators or excavating or excavates or excavation or excavated or excavate or digging or dig or digs or dug or digger	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:18
2	51065	boom or booms	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:19
3	1694136	cylinder or cylinders or actuator or actuators	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:20
4	8355	(boom or booms) near5 (cylinder or cylinders or actuator or actuators)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:20
5	314167	swing or swings or swinging or swung or swunged	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:21
6	13713	(swing or swings or swinging or swung or swunged) near5 (cylinder or cylinders or actuator or actuators)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:21
7	988	((boom or booms) near5 (cylinder or cylinders or actuator or actuators)) and ((swing or swings or swinging or swung or swunged) near5 (cylinder or cylinders or actuator or actuators))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:21
8	490	((boom or booms) near5 (cylinder or cylinders or actuator or actuators)) and ((swing or swings or swinging or swung or swunged) near5 (cylinder or cylinders or actuator or actuators))) and (excavator or excavators or excavating or excavates or excavation or excavated or excavate or digging or dig or digs or dug or digger) pin or pins	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:21
9	1127303	pin or pins	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:22
10	209	((((boom or booms) near5 (cylinder or cylinders or actuator or actuators)) and ((swing or swings or swinging or swung or swunged) near5 (cylinder or cylinders or actuator or actuators))) and (excavator or excavators or excavating or excavates or excavation or excavated or excavate or digging or dig or digs or dug or digger)) and (pin or pins)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:23
11	6006135	piping or pipe or pipes or line or lines or tube or tubes or hose or hoses or conduit or conduits	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:24

12	187	(((((boom or booms) near5 (cylinder or cylinders or actuator or actuators)) and ((swing or swings or swinging or swung or swinged) near5 (cylinder or cylinders or actuator or actuators))) and (excavator or excavators or excavating or excavates or excavation or excavated or excavate or digging or dig or digs or dug or digger)) and (pin or pins)) and (piping or pipe or pipes or line or lines or tube or tubes or hose or hoses or conduit or conduits)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:26
13	1117384	bracket or brackets or flange or flanges	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:26
14	116	(((((boom or booms) near5 (cylinder or cylinders or actuator or actuators)) and ((swing or swings or swinging or swung or swinged) near5 (cylinder or cylinders or actuator or actuators))) and (excavator or excavators or excavating or excavates or excavation or excavated or excavate or digging or dig or digs or dug or digger)) and (pin or pins)) and (piping or pipe or pipes or line or lines or tube or tubes or hose or hoses or conduit or conduits)) and (bracket or brackets or flange or flanges)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:27
15	22597	(37/\$.clas.).CCLS.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:27
17	78841	(414/\$.clas.).CCLS.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:28
18	99354	((37/\$.clas.).CCLS.) or ((414/\$.clas.).CCLS.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:28
19	81	(((((boom or booms) near5 (cylinder or cylinders or actuator or actuators)) and ((swing or swings or swinging or swung or swinged) near5 (cylinder or cylinders or actuator or actuators))) and (excavator or excavators or excavating or excavates or excavation or excavated or excavate or digging or dig or digs or dug or digger)) and (pin or pins)) and (piping or pipe or pipes or line or lines or tube or tubes or hose or hoses or conduit or conduits)) and (bracket or brackets or flange or flanges)) and ((37/\$.clas.).CCLS.) or ((414/\$.clas.).CCLS.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:28
16	38	(((((boom or booms) near5 (cylinder or cylinders or actuator or actuators)) and ((swing or swings or swinging or swung or swinged) near5 (cylinder or cylinders or actuator or actuators))) and (excavator or excavators or excavating or excavates or excavation or excavated or excavate or digging or dig or digs or dug or digger)) and (pin or pins)) and (piping or pipe or pipes or line or lines or tube or tubes or hose or hoses or conduit or conduits)) and (bracket or brackets or flange or flanges)) and ((37/\$.clas.).CCLS.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:29

20	2822957	hole or holes or aperture or apertures or orifice or orifices or oriface or orifaces	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:30
21	77	(((((boom or booms) near5 (cylinder or cylinders or actuator or actuators)) and ((swing or swings or swinging or swung or swinged) near5 (cylinder or cylinders or actuator or actuators))) and (excavator or excavators or excavating or excavates or excavation or excavated or excavate or digging or dig or digs or dug or digger)) and (pin or pins)) and (piping or pipe or pipes or line or lines or tube or tubes or hose or hoses or conduit or conduits)) and (bracket or brackets or flange or flanges)) and (hole or holes or aperture or apertures or orifice or orifices or oriface or orifaces)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:30
22	58	(((((boom or booms) near5 (cylinder or cylinders or actuator or actuators)) and ((swing or swings or swinging or swung or swinged) near5 (cylinder or cylinders or actuator or actuators))) and (excavator or excavators or excavating or excavates or excavation or excavated or excavate or digging or dig or digs or dug or digger)) and (pin or pins)) and (piping or pipe or pipes or line or lines or tube or tubes or hose or hoses or conduit or conduits)) and (bracket or brackets or flange or flanges)) and (hole or holes or aperture or apertures or orifice or orifices or oriface or orifaces)) and ((37/\$.clas.).CCLS.) or ((414/\$.clas.).CCLS.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:31
23	28	(((((boom or booms) near5 (cylinder or cylinders or actuator or actuators)) and ((swing or swings or swinging or swung or swinged) near5 (cylinder or cylinders or actuator or actuators))) and (excavator or excavators or excavating or excavates or excavation or excavated or excavate or digging or dig or digs or dug or digger)) and (pin or pins)) and (piping or pipe or pipes or line or lines or tube or tubes or hose or hoses or conduit or conduits)) and (bracket or brackets or flange or flanges)) and (hole or holes or aperture or apertures or orifice or orifices or oriface or orifaces)) and ((37/\$.clas.).CCLS.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:44

24	30	((((((((boom or booms) near5 (cylinder or cylinders or actuator or actuators)) and ((swing or swings or swinging or swung or swung) near5 (cylinder or cylinders or actuator or actuators))) and (excavator or excavators or excavating or excavates or excavation or excavated or excavate or digging or dig or digs or dug or digger)) and (pin or pins)) and (piping or pipe or pipes or line or lines or tube or tubes or hose or hoses or conduit or conduits)) and (bracket or brackets or flange or flanges)) and (hole or holes or aperture or apertures or orifice or orifices or orifice or orifices)) and (((37/\$.clas.).CCLS.) or ((414/\$.clas.).CCLS.))) not (((((((boom or booms) near5 (cylinder or cylinders or actuator or actuators)) and ((swing or swings or swinging or swung or swung) near5 (cylinder or cylinders or actuator or actuators))) and (excavator or excavators or excavating or excavates or excavation or excavated or excavate or digging or dig or digs or dug or digger)) and (pin or pins)) and (piping or pipe or pipes or line or lines or tube or tubes or hose or hoses or conduit or conduits)) and (bracket or brackets or flange or flanges)) and (hole or holes or aperture or apertures or orifice or orifices or orifice or orifices)) and ((37/\$.clas.).CCLS.))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:52
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25	58	((((((((boom or booms) near5 (cylinder or cylinders or actuator or actuators)) and ((swing or swings or swinging or swung or swung) near5 (cylinder or cylinders or actuator or actuators))) and (excavator or excavators or excavating or excavates or excavation or excavated or excavate or digging or dig or digs or dug or digger)) and (pin or pins)) and (piping or pipe or pipes or line or lines or tube or tubes or hose or hoses or conduit or conduits)) and (bracket or brackets or flange or flanges)) and (hole or holes or aperture or apertures or orifice or orifices or orifice or orifices)) and ((37/\$.clas.).CCLS.) or (((((((boom or booms) near5 (cylinder or cylinders or actuator or actuators)) and ((swing or swings or swinging or swung or swung) near5 (cylinder or cylinders or actuator or actuators))) and (excavator or excavators or excavating or excavates or excavation or excavated or excavate or digging or dig or digs or dug or digger)) and (pin or pins)) and (piping or pipe or pipes or line or lines or tube or tubes or hose or hoses or conduit or conduits)) and (bracket or brackets or flange or flanges)) and (hole or holes or aperture or apertures or orifice or orifices or orifice or orifices)) and ((37/\$.clas.).CCLS.) or ((414/\$.clas.).CCLS.))) not (((((((boom or booms) near5 (cylinder or cylinders or actuator or actuators)) and ((swing or swings or swinging or swung or swung) near5 (cylinder or cylinders or actuator or actuators))) and (excavator or excavators or excavating or excavates or excavation or excavated or excavate or digging or dig or digs or dug or digger)) and (pin or pins)) and (piping or pipe or pipes or line or lines or tube or tubes or hose or hoses or conduit or conduits)) and (bracket or brackets or flange or flanges)) and (hole or holes or aperture or apertures or orifice or orifices or orifice or orifices)) and ((37/\$.clas.).CCLS.)))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:53
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26	58	(((((((boom or booms) near5 (cylinder or cylinders or actuator or actuators)) and ((swing or swings or swinging or swung or swung) near5 (cylinder or cylinders or actuator or actuators))) and (excavator or excavators or excavating or excavates or excavation or excavated or excavate or digging or dig or digs or dug or digger)) and (pin or pins)) and (piping or pipe or pipes or line or lines or tube or tubes or hose or hoses or conduit or conduits)) and (bracket or brackets or flange or flanges)) not ((((((((((boom or booms) near5 (cylinder or cylinders or actuator or actuators)) and ((swing or swings or swinging or swung or swung) near5 (cylinder or cylinders or actuator or actuators))) and (excavator or excavators or excavating or excavates or excavation or excavated or excavate or digging or dig or digs or dug or digger)) and (pin or pins)) and (piping or pipe or pipes or line or lines or tube or tubes or hose or hoses or conduit or conduits)) and (bracket or brackets or flange or flanges)) and (hole or holes or aperture or apertures or orifice or orifices or orifice or orifices)) and ((37/\$.clas.).CCLS.)) or ((((((((((boom or booms) near5 (cylinder or cylinders or actuator or actuators)) and ((swing or swings or swinging or swung or swung) near5 (cylinder or cylinders or actuator or actuators))) and (excavator or excavators or excavating or excavates or excavation or excavated or excavate or digging or dig or digs or dug or digger)) and (pin or pins)) and (piping or pipe or pipes or line or lines or tube or tubes or hose or hoses or conduit or conduits)) and (bracket or brackets or flange or flanges)) and (hole or holes or aperture or apertures or orifice or orifices or orifice or orifices)) and ((37/\$.clas.).CCLS.)) or ((414/\$.clas.).CCLS.))) not ((((((((((boom or booms) near5 (cylinder or cylinders or actuator or actuators)) and ((swing or swings or swinging or swung or swung) near5 (cylinder or cylinders or actuator or actuators))) and (excavator or excavators or excavating or excavates or excavation or excavated or excavate or digging or dig or digs or dug or digger)) and (pin or pins)) and (piping or pipe or pipes or line or lines or tube or tubes or hose or hoses or conduit or conduits)) and (bracket or brackets or flange or flanges)) and (hole or holes or aperture or apertures or orifice or orifices or orifice or orifices)) and ((37/\$.clas.).CCLS.))))))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2004/07/23 11:53
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